Hiroshi HARA*: **New or noteworthy flowering plants from Eastern Himalaya (12)****

原 寛*: 東部ヒマラヤ植物新知見 (12)**

(Plate I)

63) **Eutrema heterophyllum** (W. W. Smith) Hara, comb. nov.

Braya heterophylla W. W. Smith in Not. Bot. Gard. Edinb. 11 : 201 (1919).

E. Nepal: Janga La—Thudam, 4400 m (Kanai et al., Jun. 21, 1972, no. 723078, fl. & young fr., TI).

Bhutan: Lingshi—Yale La—Shodu, 4400 m (Kanai et al., May 23, 1967, fl., TI).

Yunnan: Beima Shan (Forrest, no. 14385—Type in E).

Distr. E. Himalaya (Nepal, Bhutan), and W. China (Yunnan).

In our Nepalese specimens, the infructescences are corymbosely crowded; the pods are about 7 mm long, slightly curved and somewhat quadrangular, with 2 large seeds in each loculus; the seeds, although immature, are 1.3 mm long, with a long stipe (1 mm long); and the fruiting pedicels are 2–3.5 mm long and spreading horizontally. The species should be transferred to the genus *Eutrema* and is most closely related to *Eutrema compactum* O. E. Schulz, as suggested by O. E. Schulz in 1924.

64) **Prunus undulata** Hamilton ex D. Don, Prodr. Fl. Nepal. 239 (1825).

Cerasus undulata (D. Don) Seringe in DC., Prodr. 2: 540 (1825).

Cerasus acuminata Wallich, Cat. no. 719 (1829), nom. nud.; Pl. Asia. Rar. 2: 78, t. 181 (1831).

Cerasus capricida G. Don, Gen. Hist. 2: 315 (1832), nom. superfl.

Prunus Wallichii Steudel, Nom. Bot. ed. 2, 2: 404 (1841)—Kalkman in Blumea 13: 38 (1965)—Hara, Fl. E. Himal. 126 (1966)—J. E. Vidal in Fl. Camb., Laos, Vietn. 6: 172, pl. 23, 1–3 (1968); in Fl. Thail. 2(1): 68 (1970).

Prunus acuminata (non Michx. 1803) (Wall.) D. Dietrich, Syn. 3: 42

---

* Department of Botany, University Museum, University of Tokyo, Tokyo. 東京大学総合研究資料館.

** 東京大学インド植物調査研究報告 No. 29.

(1843)—Fl. Brit. Ind. **2**: 317 (1878)—Koehne in Engl., Bot. Jahrb. **52**: 296 (1915), cum f. *Wallichii* (Steud.) Koehne et f. *vulgaris* Koehne.

Cerasus Wallichii (Steud.) M. J. Roemer, Synop. Monogr. **3**: 81 (1847).

Laurocerasus undulata (D. Don) M. J. Roemer, l. c. 92 (1847).

Laurocerasus acuminata (Wall.) M. J. Roemer, l. c. 92 (1847).

C. Nepal: Narainhetty (Hamilton, Nov. 14, 1802, fl.—Type of *Prunus undulata* in BM).

Distr. E. Himalaya, Khasia, N. Burma, N. Thailand, Indo-China, W. & S. China, Malay and Sumatra.

The type specimen of *Prunus undulata* Hamilton ex D. Don in the British Museum was proved to be identical with *Prunus Wallichii* Steudel (*Cerasus acuminata* Wall.) belonging to Subgen. Laurocerasus, and *P. undulata* is the earliest correct name for the plant. On the other hand, *Prunus venosa* Koehne should be adopted for the species belonging to Subgen. Padus which has hitherto been called as *Prunus undulata* as follows:

65) **Prunus venosa** Koehne in Sarg., Pl. Wilson. **1**: 60 (1911).

Prunus undulata Hamilt. ex D. Don sensu Hook. f., Fl. Brit. Ind. **2**: 316 (1878)—Koehne in Engl., Bot. Jahrb. **52**: 285 (1915)—Hara, Fl. E. Himal. 126 (1966); **2**: 55 (1971).

Prunus undulata f. *venosa* (Koehne) Koehne, l. c. 285 (1915).

Distr. Himalaya (Kumaon to Bhutan), Khasia, S. Tibet, and W. & C. China.

66) **Begonia** (§ Begoniastrum) **leptoptera** Hara, sp. nov. (Plate I. Left)

An *B. adscendens* C. B. Clarke sensu Hara, Fl. E. Himal. **2**: 83 (1971)?

Tuberifera, estolonifera. Folia radicalia longe petiolata, petiolis 8–12 cm longis superiore pubescentibus, cordata crassiuscula, 8–10 cm longa 5–9 cm lata, apice acuminata vel caudato-acuminata, basi profunde cordata, margine inaequaliter serrata, interdum breviter 1–2-lobulata, supra intense viridia, nervis impressis, vulgo inter nervos albo-maculata, rigide pilosa, infra rubescentia, ad nervos parce rigide pilosa. Caulis floralis erectus 10–15 cm altus saepe unifoliatus. Folia caulina longe petiolata, radicalia similia. Inflorescentiae vulgo simplices umbellatae, pedicellis gracilibus glabris. Flores mediocres rosacei. Flores ♂: tepala 4, majora 7–10 mm longa; stamina brevissime monadelpha; antherae ellipticae, apice paullo retusae. Flores ♀: tepala 5 inaequalia, subglabra; styli 3 subliberi 1.5–2 mm longi; stigmata capitata vel lunata; ovarium 3-alatum parce pilosum, pilis longis, ala una valde elongata. Capsulae 8–10 mm longae; alae duae breves, subtriangulares; ala una valde elongata, triangulari-lanceolata, paullo ascendens, 15–30 mm longa 4–7 mm lata.

C. Nepal: Kalingchok, Thala—Tale Bisauna, 2500 m (Kanai, Chuma & Nagano, no. 4032, Sep. 10, 1970 Type in TI).

The species is allied to *Begonia Josephii* A. DC., but differs from the latter by non-peltate maculate leaves, generally simple umbellate inflorescences, and much elongate narrow wing of capsules. Although *B. adscendens* C. B. Clarke is similar to this species in the shape of fruits, the type specimen of the former species at Kew from Naga Hills has leaves glabrous above and pilose only on nerves beneath.

The fruiting specimens collected from E. Nepal in 1963 have leaves densely pubescent above.

67) **Sonerila khasiana** C. B. Clarke in Fl. Brit. Ind. **2**: 539 (1879)—C. E. C. Fischer in Kew Bull. **1932**: 199.

C. Nepal: Latsu—Pati Bhanjyang, 1900 m (Kanai, Hara & Ohba, no. 723110, Aug. 30, 1972, fl., TI).

E. Nepal: Maghang Khola, E. of Num, 8000 ft (Stainton, no. 1595, Sep. 6, 1956, BM).

S. Tibet: Tsango-Po River, 12500 ft (Cutting & Vernay, no. 94 B, Aug. 31, 1935, K).

Distr. C. & E. Nepal, S. Tibet, Khasia, Lushai Hills, Naga Hills, and N. Burma !

In the Nepalese specimens, the leaves are almost glabrous above, and sometimes sparsely hirsute on nerves beneath.

68) **Arisaema** (§ Trisecta) **vexillatum** Hara et Ohashi, sp. nov. (Plate I. Right & Fig. 1)

Paradioicum. Bulbus depresse globosus 1.5–3 cm in diametro. Pseudocaulis 2–13 cm altus. Folium solitarium 3-foliolatum; petiolus 18–27 cm longus dilute viridis immaculatus; foliola subsessilia, mediana depresse obovata vel rhomboidea apice abrupte acuminata 4.5–11 cm longa 3–10.5 cm lata, nerviis lateralibus utrinque 8–10, lateralia ovata obliqua apice acuta 8–15 cm longa 4–9 cm lata. Pedunculus folio brevior 4–8 cm longus dilute viridis. Spathae tubus cylindricus 5–7 cm longus 1.5–2 cm in diametro atropurpureus

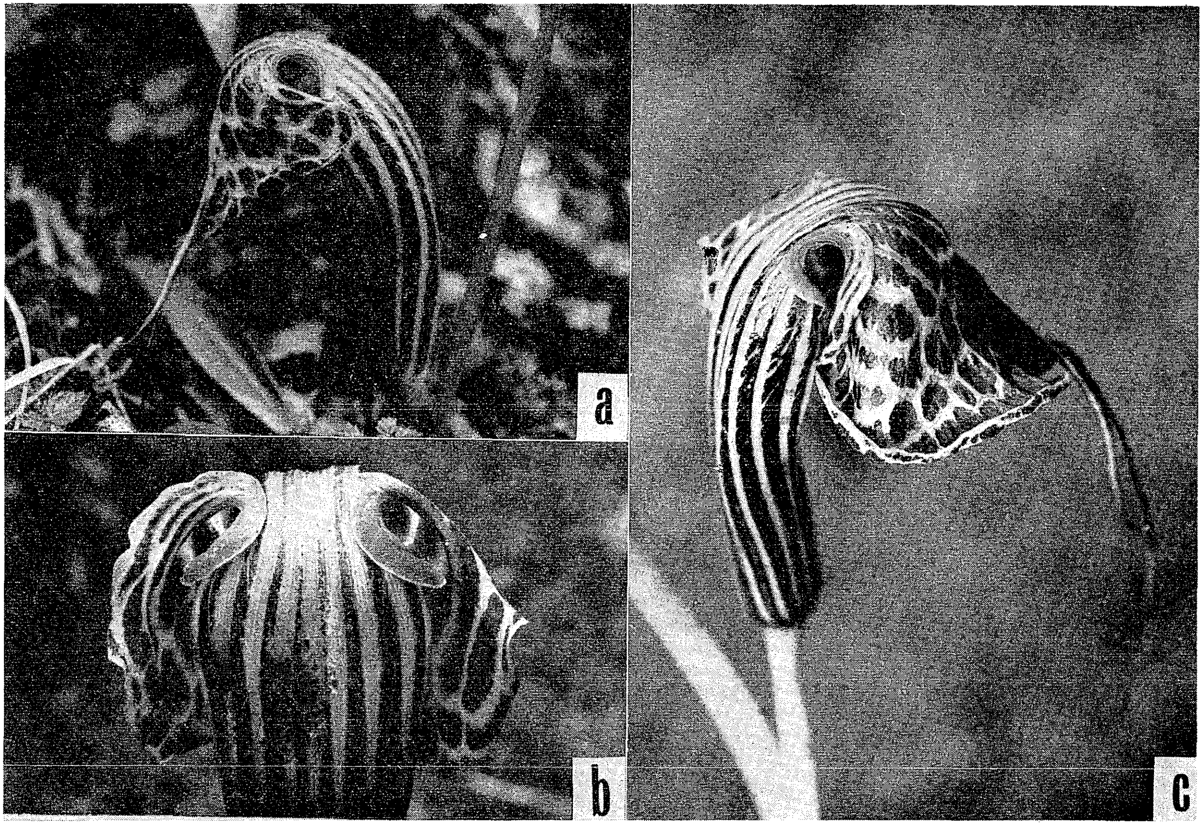


Fig. 1. *Arisaema vexillatum* Hara et Ohashi. a. Side view of a spathe. ×2/3. b. Back view of the upper part of spathe. ×3/2. c. Side view of a spathe. ×1. (Photo by Dr. H. Ohashi)

longitudinaliter viridescenti-nervosus, intus distincte longitudinaliter lamellatus, lamellis 2–4 mm latis, fauce abrupte valde constrictus dorso 1–1.5 cm latus dense longitudinaliter albo-costatus incurvus, margine anguste revolutus; lamina supra faucem valde dilatata reniformis vel subcordata 3–5 cm longa 4–7 cm lata declinata vel dependens conduplicata viridescens inter nervos grosse reticulatos atropurpurea, apice subtruncata vel rotundata caudata, cauda 2–3 cm longa atropurpurea. Spadix unisexualis 1.5–2 cm longus; antherae vulgo 3–4 lunatim dehiscentes; ovaria ovata, stigmate subsessile parvo; appendix flagellata 9–11 cm longa, basi 4–6 mm crassa truncata stipite 7–15 mm longo suffulta, superiore filiformis lamina spathae paullo exserta atropurpurea.

Hab. E. Nepal: Thudam, 3400 m (Kanai, Ohashi, K. & Z. Iwatsuki, Ohba & Shakya, no. 723074, Jun. 24, 1972, fl.—Type in TI; Jun. 26, 1972, fl., TI); Inukhu Khola, 11500 ft. (S. B. Lyon, no. 2055, Jun. 18, 1964, fl., BM).

This species is closely allied to *Arisaema ostiolatum* Hara and *A. propinquum* Schott, but is clearly distinguished from them by the shape of spathe. The spathe is once strongly constricted at the throat, bridge-shaped on the back and 1–1.5 cm wide, then suddenly expanded into a broad reniform blade 4–7 cm wide, with a tail 2–3 cm long.

69) **Streptopus parasimplex** Hara et Ohashi, sp. nov. (Fig. 2. B)

S. simplex D. Don sensu Hara, Fl. E. Himal. 417 (1966), pro parte.

Caulis 10–33 (60) cm altus simplex vel pauci-ramosus glaber. Folia oblongo-lanceolata 3–9 (11) cm longa 7–23 (27) mm lata, apice longe vel caudato-acuminata, basi amplexicaulia glabra, margine laevia. Pedunculi axillares filiformes arcuato-dependentes 12–50 mm longi glabri. Flores campanulati albi nutantes 10–16 mm longi. Tepala elliptica subacuta, intus basi minute purpureo-punctata. Stamina stylo breviora, filamenta 1.5–2 mm longa, antherae anguste oblongae subacutae 2–3 mm longae. Pistillum tepalo dimidio brevius, stylus 4–5 mm longus, apice breviter trifidus, lobi 1–1.5 mm longi.

E. Nepal: Thudam, 3400 m (Kanai et al., no. 723120, Jun. 22, 1972, fl. —Type in TI); Lama Chungbu—Thudam, 4500–3400 m (Kanai et al., Jun. 24, 1972, TI); Kokim Pokhari, 3200 m (Kanai et al., Jun. 11, 1972, TI); Hile Chok—Ghopte, 3500 m (Kanai et al., Jun. 12, 1972, TI); Topke Gola, 3600 m (Kanai et al., Jun. 18, 1972, TI).

Sikkim: Migothang—Nayathang, 4200–3300 m (Hara et al., Jun. 1, 1960,

TI) ; Nayathang—Chiyabanjan, 3500–3100 m (Hara et al., Jun. 2, 1960, TI).

Streptopus simplex D. Don[1] has been the only species of the genus known from the Himalayas. But it became clear that two distinct types are clearly recognized in the field.

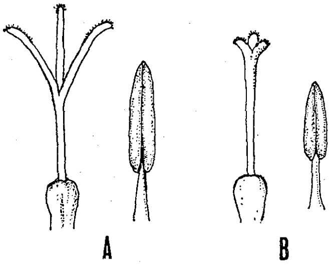


Fig. 2. Pistil and stamen of *Streptopus simplex* (A) and *S. parasimplex* (B). ×4.

One type (A) has generally taller branched stems, broader leaves 1.5–4.5 cm wide, and styles deeply trifid nearly to the middle, with lobes 2.5–3.5 mm long (Fig. 2. A). The other (B) has simple or few-branched stems often less than 30 cm high, narrower leaves usually less than 2 cm wide, and styles shortly trifid in the upper part, with short lobes 1–1.5mm long. These two types are sometimes found in the same district, but the type B occurs generally at higher altitudes.

D. Don (1825) described *S. simplex* based on Wallich's specimen from Nepal, but Don's type is not extant in the British Museum (Natural History). The only specimen collected by Wallich from Nepal is the one from Gossainthan (Aug. 1821) as No. 5112 A *Streptopus candida* in the Wallich Herbarium at Kew. It has deeply trifid styles and branched stem, and agrees with the type A. I would like to express my sincere thanks to Dr. W. T. Stearn and Mr. L. H. J. Williams for their kindness in giving me the informations mentioned above.

In the original description, D. Don stated 'Caulis simplicissimus, pedalis v. bipedalis. Folia 3-pollicaria, unciam lata'. The height of stem and the size of leaves suggest the type A rather than the type B. Moreover D. Don (1841) himself modified the description of *S. simplex* in his monograph of *Streptopus*, and clearly noted as 'stigmatibus styli sublongitudine', 'Caulis erectus, ramosus', and 'stigmata 3, longiuscula, recurvato-patentia, stylo parum brevior', and cited the Nepalese specimen, 'in Emodi montibus ad Gossaingthan (Wallich) in Herb. Wall.', which is the same as Wallich no. 5112A. These descriptions well agree with the type A. Kunth (1843) published *Hekorima candida* apparently based on Wallich no. 5112, but this name is superfluous, as he cited the earlier name *Streptopus simplex* as a synonym.

---

[1] **Streptopus simplex** D. Don, Prodr. Fl. Nepal. 48 (1825) ; in Trans. Linn. Soc. **18**: 530 (1841)—Baker in Journ. Linn. Soc. **14**: 591 (1875)—Fl. Brit. Ind. **6**: 322 (1892)—Fassett in Rhodora **37**: 93 (1935)—Hara, Fl. E. Himal. 417 (1966) ; **2**: 173, t. 11a (1971).

Streptopus candida Wallich, Cat. no. 5112 (1831–32), nom. nud.

Hekorima ? *candida* Kunth, Enum. Pl. **4**: 204 (1843), nom. superfl.

Lectotype. C. Nepal : Gossainthan (Wallich, no. 5112A, Aug. 1821 in KW).

Under these circumstances, it is proper to designate Wallich's specimen, no. 5112A from Gossainthan of Nepal in the Wallich Herbarium as the lectotype of *S. simplex*, and the name should be retained for the type A.

Explanation of Plate I.

Right. *Arisaema vexillatum* Hara et Ohashi. Eastern Nepal: Thudam, June 24, 1972. (Photo by Dr. H. Ohashi)

Left. *Begonia leptoptera* Hara. Central Nepal: Kalingchok, Thala—Tale-Bisauna, Sept. 10, 1970.

* * * *

63) *Eutrema heterophyllum* (W. W. Sm.) Hara 雲南省から記載されたが東部ヒマラヤにも産することが分った。蒴室に比較的大形の長い柄のある種子が2個はいっているなどの点でワサビ類に近いことが分ったので新組合せを行った。

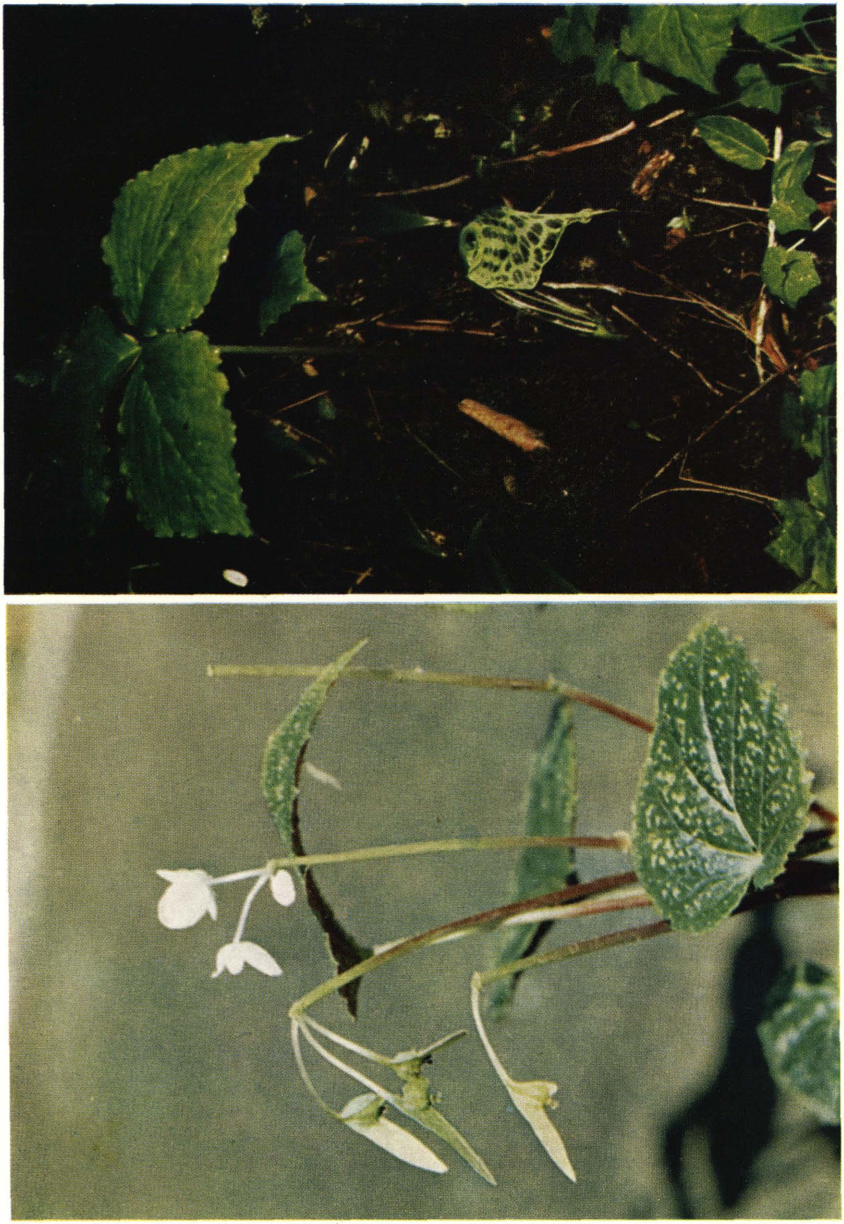
64–65) *Prunus undulata* Ham. ex D. Don & *P. venosa* Koehne D. Don の基準標本を検討し，*P. undulata* はこれまで *P. Wallichii* と呼ばれてヒマラヤから中国にかけて分布する常緑の種と同一であることが明らかになり，これまで *P. undulata* に当てられてきたウワミズザクラ群の種には *P. venosa* を採用する。

66) *Begonia leptoptera* Hara (新種) ネパール産ベゴニアの中形の一種で，蒴果の一翼が非常に細長くなる特性がある。

67) *Sonerila khasiana* C. B. Clarke ノボタン科の小形の草でヒマラヤからは初めての記録である。

68) *Arisaema vexillatum* Hara et Ohashi (新種) 東部ネパールで見出したテンナンショウの一種で，Fig. 1 に見られるように仏炎苞の形が非常に変っている。

69) *Streptopus parasimplex* Hara et Ohashi (新種) タケシマラン属はヒマラヤから1種だけしか知られていないが，はっきり区別できる2型があることが分った。本新種の方が高地に産し，やや小形で葉が狭長である外，花柱の形が Fig. 2 に示したように異っている。



H. HARA: Flowering plants from E. Himalaya (12)